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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,038	03/01/2004	Akio Takahashi	13425.49US01	1258
23552	7590	05/25/2006	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			ILAN, RUTH	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/791,038	<b>Applicant(s)</b> TAKAHASHI ET AL.	
	<b>Examiner</b> Ruth Ilan	<b>Art Unit</b> 3616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/1/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The disclosure is objected to because of the following informalities: On page 7, line 15 "food" should be "hood"..

Appropriate correction is required.

### ***Claim Objections***

3. Claim 5 is objected to because of the following informalities: In line 1, "claim1" should be "claim 1". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stopczynski (US 2003/0149530) in view of Trajkovic et al. (US 2003/0112132.) Stopczynski teaches (Figure 1) an apparatus for a vehicle for protection of a colliding object including a collision prediction and detection module that (16) which delivers a precautionary signal when a collision is predicted (see para. [0026] and [0049]). Also taught is a hood airbag (paragraph [0035]) and a camera [0026] and monitor (paragraph [0036]) that displays (30) upon receipt of the precautionary signal. Stopczynski does not disclose the specifics of the monitor, and such does not specifically disclose that the monitor is disposed in the cabin of the vehicle, or further that the image is displayed directly on the windshield. Trajkovic et al. teaches that it is well known that head-up displays are projected onto the windshield. It would have been obvious to one having ordinary skill in the art at the time of the invention to understand the invention of Stopczynski to include the type of display taught by Trajkovic et al., in order to provide a display that enhances the operators view in precollision events, and in order to provide a convenient location for the monitor that does not require installation of a monitor that would otherwise take up space. Regarding claim 3, it is well understood that camera sensors employ image processing. Regarding claim 4, Stopczynski teaches that an

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infrared camera may be used (para [0036].) Regarding claim 5, accelerometers are used (18) for the collision detection.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stopczynski (US 2003/0149530) in view of Trajkovic et al. (US 2003/0112132) and further in view of Hamada et al. (US 6938715.) Stopczynski in view of Trajkovic et al. is discussed above, and fails to teach the details of the hood airbag, including that the hood skin is elevated by the airbag so that both the hood skin and airbag protect the passenger. Hamada et al. teaches such an airbag, which is useful because it increases the load absorption capabilities of the hood and decreases the impact force on a colliding object (see col. 5, lines 48-57) Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include the air bag/ hood device of Hamada et al. with the combination of Stopczynski in view of Trajkovic et al. in order to provide an pedestrian protection device with a decrease in impact force.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Strumolo et al., Tsuji et al. and Smith et al. teach image enhancement systems of interest Skrbina et al., Rao et al., Hashimoto et al., ('611, '014 and '011) Ran et al., Franke et al., Nishira et al., Nagaoka et al., and Cho teach various pedestrian protection and precrash systems of interest.

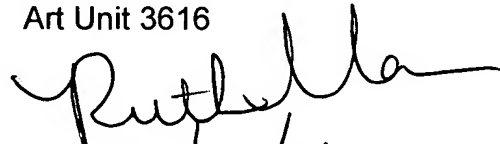
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ruth Ilan  
Primary Examiner  
Art Unit 3616



5/23/06

RI  
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